### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Yes

No

N/A

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

# WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-027526 Address: 333 Burma Road **Date Inspected:** 21-Apr-2012

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

**CWI Name:** See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** 

**Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG/Tower

### **Summary of Items Observed:**

At the start of the shift this Quality Assurance Lead Inspector (QAI) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) Quality Control (QC) personnel. The observations and inspections were performed as noted below:

A). This Quality Assurance Lead Inspector (QALI) assigned the QA Inspectors to the following, but not limited to the work station(s) listed, to observe the welding and the QC inspection of the following:

Joselito Lizardo-Tower, 13 Meter El. (Observed the welding, repair welding, QC inspection and testing of diaphragm plates and ESW), (Observed the welding and QC inspection of the PQR fillet weld soundness test ) and QA verification.

Doug Frey-OBG E12 and W12 (Observation of welding and QC inspection of the deck access hole and longitudinal stiffeners), OBG E11 and E12 (Observation of QC inspection and testing of temporary attachments).

Art Peterson-OBG E6 and E12 (Observation of production welding, visual weld repair and profile grinding).

Daniel Reyes-Tower Shear Plates, ESW-(ESW UT verification and visual weld repairs).

NOTE: See QA daily Weld Inspection Reports (WIR) and NDE reports for additional information and details.

Quality Assurance Lead Inspector (QALI) Summary

# WELDING INSPECTION REPORT

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This QA Lead Inspector (QALI) observed the QA Inspector's Joselito Lizardo, Art Peterson and Doug Frey monitor the work performed by the QC inspectors at random intervals and also observed the QA Inspectors verify the welding parameters, the minimum preheat and the maximum interpass temperatures for compliance with the contract specifications. The QAI's utilized a Fluke 337 clamp meter to measure the electrical welding parameters, Tempil Heat Indicators and/or a Fluke 63 IR Thermometer for verifying the preheat and interpass temperatures. At the conclusion of the shift, this QA Lead Inspector discussed and reviewed the work performed by the QAI's in regards to the various observations and the verifications of the WPS's, consumables, welding parameters, preheat and interpass temperatures. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications and no issues were noted.

#### **Tower Shear Plates**

At the request of QC Lead Inspector, Bonifacio Daquinag, Jr., this QAI performed a random ultrasonic verification tests of the Complete Joint Penetration (CJP) square groove weld (ESW) identified as weld numbers S-042 (L) and W-042 (M). A total area of approximately 10% was ultrasonically tested to verify the weld and the testing by QC meet the requirements of the contract documents. The examination was performed utilizing the first leg and with the scanning from face "A" and face "B". For additional information see the ultrasonic test report TL-6027 generated on this date. The total length of 1800 mm was verified. QAI Note: One recordable indication was noted by this QAI at weld number S-042 (L). The QC technician Jesse Cayabyab was informed, by this QAI, and confirmed the recordable indication.

This QAI also observed the welder, Jeremy Dolman ID-5042, perform the repair welding and grinding on the ESW identified as weld number N-042 (J). The repair areas were inspected and marked by QC inspector Jesse Cayabyab and Steve McConnell. At the conclusion of the shift this repair task was not completed. The work observed appeared to comply with the contract documents.

### **Summary of Conversations:**

There were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift.

#### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes, Danny	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer